

**S4 Table. Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) criteria for studies included in the meta-analyses.**

**(A) Meta-analysis of studies assessing seroconversion rate after H1N1 vaccination in ESRD patients undergoing hemodialysis**

Number of participants	Starting level of evidence	Quality assessment					Reasons to increase level of evidence (Large magnitude of effect; Dose-response gradient; Potential confounding)	Overall quality of evidence
		Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias		
1191	Low	Not serious	Not serious	Not serious	Not serious	Serious	N/A	Very low

**(B) Meta-analysis of studies assessing seroprotection rate after H1N1 vaccination in ESRD patients undergoing hemodialysis**

Number of participants	Starting level of evidence	Quality assessment					Reasons to increase level of evidence (Large magnitude of effect; Dose-response gradient; Potential confounding)	Overall quality of evidence
		Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias		
1001	Low	Serious	Serious	Not serious	Not serious	Serious	N/A	Very low

**(C) Meta-analysis of studies assessing seroconversion rate after H3N2 vaccination in ESRD patients undergoing hemodialysis**

Number of participants	Starting level of evidence	Quality assessment					Reasons to increase level of evidence (Large magnitude of effect; Dose-response gradient; Potential confounding)	Overall quality of evidence
		Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias		
1012	Low	Serious	Serious	Not serious	Serious	Serious	N/A	Very low

**(D) Meta-analysis of studies assessing seroprotection rate after H3N2 vaccination in ESRD patients undergoing hemodialysis**

Number of participants	Starting level of evidence	Quality assessment					Reasons to increase level of evidence (Large magnitude of effect; Dose-response gradient; Potential confounding)	Overall quality of evidence
		Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias		
691	Low	Not serious	Serious	Not serious	Not serious	Serious	N/A	Very low

**(E) Meta-analysis of studies assessing adverse events rates after COVID-19 vaccination in ESRD patients undergoing hemodialysis**

Number of participants	Starting level of evidence	Quality assessment					Reasons to increase level of evidence (Large magnitude of effect; Dose-response gradient; Potential confounding)	Overall quality of evidence
		Risk of bias	Inconsistency	Indirectness	Imprecision	Publication bias		
677	Low	Not serious	Serious	Not serious	Not serious	Not serious	N/A	Very low